



House of Commons
Science and Technology
Committee

Annual Report 2004

Second Report of Session 2004–05

WELLCOME LIBRARY
General Collections
P
6279



22501071112



House of Commons

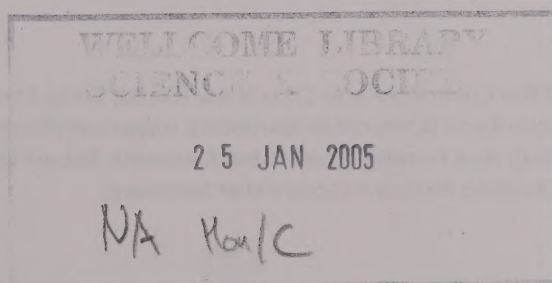
Science and Technology Committee

Annual Report 2004

Second Report of Session 2004–05

Report

*Ordered by The House of Commons
to be printed 12 January 2005*



HC 199

Published on 17 January 2005
by authority of the House of Commons
London: The Stationery Office Limited
£8.50

The Science and Technology Committee

The Science and Technology Committee is appointed by the House of Commons to examine the expenditure, administration and policy of the Office of Science and Technology and its associated public bodies.

Current membership

Dr Ian Gibson MP (*Labour, Norwich North*) (Chairman)
Paul Farrelly MP (*Labour, Newcastle-under-Lyme*)
Dr Evan Harris MP (*Liberal Democrat, Oxford West & Abingdon*)
Kate Hoey MP (*Labour, Vauxhall*)
Dr Brian Iddon MP (*Labour, Bolton South East*)
Mr Robert Key MP (*Conservative, Salisbury*)
Mr Tony McWalter MP (*Labour, Hemel Hempstead*)
Dr Andrew Murrison MP (*Conservative, Westbury*)
Geraldine Smith MP (*Labour, Morecambe and Lunesdale*)
Bob Spink MP (*Conservative, Castle Point*)
Dr Desmond Turner MP (*Labour, Brighton Kemptown*)

Powers

The Committee is one of the departmental Select Committees, the powers of which are set out in House of Commons Standing Orders, principally in SO No.152. These are available on the Internet via www.parliament.uk

Publications

The Reports and evidence of the Committee are published by The Stationery Office by Order of the House. All publications of the Committee (including press notices) are on the Internet at www.parliament.uk/s&tcom

A list of Reports from the Committee in the present Parliament is included at the back of this volume.

Committee staff

The current staff of the Committee are: Chris Shaw (Clerk); Emily Commander (Second Clerk); Alun Roberts (Committee Specialist); Hayaatun Sillem (Committee Specialist); Ana Ferreira (Committee Assistant); Robert Long (Senior Office Clerk); and Christine McGrane (Committee Secretary).

Contacts

All correspondence should be addressed to the Clerk of the Science and Technology Committee, Committee Office, 7 Millbank, London SW1P 3JA. The telephone number for general inquiries is: 020 7219 2793; the Committee's e-mail address is: scitechcom@parliament.uk

Contents

Report	<i>Page</i>
1 Introduction	3
Core tasks and objectives	5
Committee visits	7
2 Committee activities and objectives	8
Objective A: To examine and comment on science and technology policy	9
Objective B: Government expenditure on science and technology	12
Objective C: Administration of the Office of Science and Technology and the Research Councils	14
Objective D: To assist the House in debate and decision	18
3 Other comments	19
Government Responses	19
Relations with the Office of Science and Technology and other Government departments	19
Relationships with the science and engineering community and the public	20
Working methods and innovation	21
4 Acronyms used in this Report	23
Formal minutes	24

1 Introduction

1. This Committee is appointed by the House of Commons to examine the expenditure, administration and policy of the Office of Science and Technology (OST) and its associated bodies. As well as its role in advising the Chief Scientific Advisor (CSA) and the Director General of the Research Councils (DGRC) on the allocation of the Science Budget, OST has a role in overseeing science and technology policy across Government. The Committee has a similarly broad remit.

2. This is the Committee's third Annual Report. In it we provide an account of the ways in which our work in 2004 addresses our core tasks.¹ The establishment of these tasks follows a recommendation made by the Liaison Committee, which in turn arose from a resolution of the House of 14 May 2002. Their purpose is to provide an improved structure for the scrutiny of Government by select committees, in line with a number of other measures designed to modernise the working practices of the House of Commons. Our 12 core tasks have been adapted from the Liaison Committee template to take account of the unique position of the Office of Science and Technology (OST) within the Department of Trade and Industry (DTI) and the role of the CSA in promoting the use of science across Government. The Report also follows up some of the more general issues that were raised in last year's Annual Report or which arose during the course of 2004.

3. During 2004 we held 42 meetings and took oral evidence at 41 of them. We published 15 Reports and pursued major inquiries into nanotechnology, scientific publications, the use of science in UK international development policy, and human reproductive technologies and the law.²

1 See Box 1, below

2 See Table 1 for a full summary of inquiries, evidence sessions, Reports and responses

Table 1: status of inquiries conducted in 2004

Name of inquiry	Number of evidence sessions	Status	Government Response
Chief Executive of the Medical Research Council: Introductory Hearing	Evidence session held in 2003	Reported January 2004 (HC 55)	June 2004 (HC 629)
The Work of the Biotechnology and Biological Sciences Research Council	Evidence session held in 2003	Reported February 2004, (HC 6)	April 2004 (HC 526)
Too little too late? Government Investment in Nanotechnology	1. The remainder were held in 2003	Reported April 2004 (HC 56)	June 2004 (HC 650)
Within REACH: The EU's new chemicals strategy	3, plus 2 in Brussels	Reported May 2004 (HC 172)	July 2004 (HC 895)
Director General for Higher Education: Introductory Hearing	1	Reported June 2004 (HC 461)	September 2004 (HC 1015)
The Work of the Council for the Central Laboratory of the Research Councils	1	Reported June 2004 (HC 462)	November 2004 (HC 1199)
Director General of the Research Councils: Introductory Hearing	1	Reported July 2004 (HC 577)	September 2004 (HC 1059)
Scientific Publications: Free for all?	4	Reported July 2004 (HC 399) and November 2004 (HC 1200)	November 2004 (HC 1200); awaiting Response to second Report
Research Assessment Exercise: a re-assessment	2	Reported September 2004 (HC 586)	November 2004 (HC 34)
The Use of Science in UK International Development Policy	7	Reported October 2004 (HC 133)	
Government support for Beagle 2	2	Reported November 2004 (HC 711)	
The Work of the Economic and Social Research Council	1	Report expected early 2005	-
Scrutiny of the Office of Science and Technology 2004	2, plus 4 x Science Question Time	Report expected early 2005	-
The Future of the National Institute for Medical Research	2, plus 1 in 2005	Report expected early 2005	-
Human Reproductive Technologies and the Law	11 so far, 1 more expected in 2005	Report expected early 2005	-
Forensic Science	1 so far, 4 more expected in 2005	Report expected Easter 2005	-

Core tasks and objectives

Box 1: Committee objectives and core tasks

OBJECTIVE A: To examine and comment on science and technology policy

Task 1: To examine policy proposals from the UK Government and the European Commission and other outputs from the Office of Science and Technology

Task 2: To conduct inquiries as appropriate, identifying and examining areas of emerging policy, or where existing policy is deficient, and making proposals

Task 3: To scrutinise legislation and proposed legislation on science and technology matters

OBJECTIVE B: Government expenditure on science and technology

Task 4: To examine the expenditure plans and outturn of the Department of Trade and Industry, so far as it relates to science and technology, and of the Research Councils

Task 5: To examine other Government Departments' expenditure on research and advice on science and technology

Task 6: To monitor European Union expenditure on scientific research

OBJECTIVE C: Administration of the Office of Science and Technology and the Research Councils

Task 7: To examine the Office of Science and Technology's objectives and performance

Task 8: To monitor the work of the Research Councils

Task 9: To scrutinise major appointments made by the Secretary of State for Trade and Industry

Task 10: To examine the implementation of legislation and major policy initiatives, following up earlier Reports by the Committee

Task 11: To hold Ministers to account

OBJECTIVE D: To assist the House in debate and decision

Task 12: To produce Reports informing the House on science and technology matters and of the science perspective on public policy issues, some of them being suitable for debate in the House, including Westminster Hall, or in debating committees

Table 2: Relationship of inquiries and evidence sessions to objectives and core tasks

Inquiries/Evidence Sessions	Objective A			Objective B			Objective C					Objective D
	1	2	3	4	5	6	7	8	9	10	11	12
Chief Executive MRC: Introductory								✓	✓			
BBSRC				✓				✓				
Nanotechnology		✓		✓	✓	✓		✓		✓	✓	✓
EU Chemicals	✓		✓		✓	✓					✓	✓
DGHE: Introductory					✓				✓			
CCLRC				✓				✓				
DGRC: Introductory								✓	✓			
Scientific Publications		✓		✓	✓	✓	✓	✓				
Research Assessment Exercise		✓		✓	✓		✓	✓		✓		
Science in UK International Development Policy		✓			✓	✓	✓	✓			✓	
Beagle 2		✓		✓		✓	✓	✓			✓	
ESRC				✓				✓				
OST Scrutiny	✓			✓			✓	✓			✓	
The Future of NIMR		✓		✓				✓				
Human Reproductive Technologies and the Law		✓	✓		✓					✓	✓	
Forensic Science	✓				✓			✓			✓	

Committee visits

Table 3: Committee visits in 2004

Location of visit	Date of visit	Participants	Purpose of visit
Dana Centre, London	22 January 2004	3 Members, 3 staff	Human Reproductive Technologies and the Law: launch of e-consultation
Brussels	1—2 February 2004	7 Members, 3 staff	EU Chemicals
British Library and the Wellcome Trust, London	10 February 2004	3 Members, 2 staff	Scientific Publications
Reed Elsevier, London	26 February 2004	5 Members, 1 staff	Scientific Publications
Fertility clinics, London	4 May 2004	6 Members, 3 staff	Human Reproductive Technologies and the Law
Overseas Development Institute	25 May 2004	7 Members, 2 staff	The Use of Science in International Development Policy
Malawi	15—20 June 2004	7 Members, 2 staff	The Use of Science in International Development Policy
British Library, London	20 July 2004	5 Members, 3 staff	Scientific Publications: press conference on Report
National Institute for Medical Research, Mill Hill	19 October 2004	3 Members, 2 staff	The Future of the National Institute for Medical Research
QinetiQ, Farnborough	2 November 2004	5 Members, 2 staff	Nanotechnology and Terrorism follow ups; general
Sweden and Italy	14—17 November 2004	6 Members, 2 staff	Human Reproductive Technologies and the Law

2 Committee activities and objectives

Box 2: Impact and results of the Committee's work

- The Clean Neighbourhoods and Environment Bill includes provisions to reduce light pollution, as recommended in our Report on *Light Pollution and Astronomy*.
- The Department of Health will await the outcome of our inquiry into human reproductive technologies and the law before it undertakes any revision of the 1990 Human Fertilisation and Embryology Act.
- The Department for International Development has recruited a Chief Scientific Adviser, in line with recommendations made in our Report on *The Use of Science in UK International Development Policy*. The Secretary of State credited the Committee with the appointment in oral evidence in July. We have had several letters of support following the publication of our Report, including one from the Joint Coordinator of the UN international task force on science, technology and innovation.
- The Committee held a successful press conference at the British Library to launch its Report on *Scientific Publications: Free for all?*. Following the publication of the Report, the Chairman and members of the Committee have spoken at several conferences, and the Committee has received nearly 50 letters and emails in support of its findings.
- We provided an opinion on the European Commission Communication, *Towards a European Strategy for nanotechnology*, to the European Scrutiny Committee.
- A Committee member participated in a European Standing Committee debate on the proposed new EU chemicals legislation on 16 June.
- Four of our Reports were debated in Westminster Hall: *Light Pollution and Astronomy*; *The Scientific Response to Terrorism*; *Too little too late? Government Investment in Nanotechnology*; and *Within REACH: The EU's new chemicals strategy*.
- The Government has announced new legislation to protect people connected with scientific research on animals from the actions of animal rights protesters. This follows repeated questions on the subject to Lord Sainsbury during "Science Question Time".
- The Government has introduced measures to help ensure that regional provision of science subjects in universities is secured. This follows questions about departmental closures raised as part of our examination of the Research Assessment Exercise, and with the Science Minister.

Objective A: To examine and comment on science and technology policy

Task 1: To examine policy proposals from the UK Government and the European Commission and other outputs from the Office of Science and Technology

4. In 2004 science assumed an important place on the political agenda with the Government's publication of a *Science and Innovation Investment Framework 2004—2014*.³ Jointly compiled by HM Treasury, the Department of Trade and Industry (DTI) and the Department for Education and Skills (DfES), this document established a basis from which the Government will set out to make "Britain the most attractive location in the world for science and innovation", and announced an additional £1 billion funding for science over the Spending Review 2004 period.⁴ On 1 November we held an evidence session on the investment framework with Ministers from each of the three departments that contributed towards it. Our conclusions on the implications for UK science of this document will form a major part of our OST Scrutiny Report 2004. This Report will also examine the DTI's *Five Year Programme*, published in November 2004.⁵

5. Science policy outputs are not confined to the Office of Science and Technology (OST) and its parent department, DTI. Policy proposals from across Government can have an impact on science and technology in the UK. For example, the Home Secretary announced in July 2003 that he would accept the recommendation of the McFarland report to develop the Forensic Science Service as a Public Private Partnership. On 21 July 2004, we announced that we would conduct an inquiry into the likely consequences of this decision and the wider issues affecting forensic science in the UK at present, including the quality of forensic science education and training and the use of forensic science in court. The Committee started taking oral evidence in December, and will hold several further oral evidence sessions in the new year. We hope to produce a Report in spring 2005.

6. We have also examined science-related policy at a European level. On 29 October 2003 the European Commission published proposals for new legislation on the regulation of chemicals. On the same day we announced an inquiry to consider the implications of the proposals. They proved to be controversial and attracted attention from industry, academia, environmentalists and animal rights groups. We took evidence in Westminster and Brussels as part of our inquiry. Our Report, *Within REACH: The EU's new chemicals strategy*, published in May 2004, concluded that the UK Government had played an important role in developing the new European legislation; that its stance was, for the most part, sensible; and that it had made a welcome attempt to ensure that the UK debate on the proposals was constructive.⁶ One of the Committee members participated in a European Standing Committee debate when the proposals were considered on 16 June 2004. We also ensured that there was a debate on our Report in Westminster Hall, on 9 September 2004.

3 HM Treasury, DTI and DfES, *Science and Innovation Investment Framework 2004–2014* (July 2004)

4 Investment Framework, p 1

5 DTI, *Creating Wealth from Knowledge: The DTI Five Year Programme* (November 2004)

6 Sixth Report of the Committee, Session 2003–04, *Within REACH: The EU's new chemicals strategy*, HC 172

7. As our inquiry into scientific publications was drawing to a close, the European Commission announced on 15 June 2004 that it would be conducting a study into the economic and technical evolution of scientific, technical and medical publishing markets in Europe.⁷ We have made the European Commission aware of our Report, *Scientific Publications: Free for all?*, and intend to feed our findings into the new study.⁸ We also provided an opinion on the European Commission Communication, *Towards a European Strategy for Nanotechnology*, to the European Scrutiny Committee, based on our Report, *Too little too late: Government Investment in Nanotechnology*.⁹

Task 2: To conduct inquiries as appropriate, identifying and examining areas of emerging policy, or where existing policy is deficient, and making proposals

8. Most of our major inquiries have examined areas of policy that we suspected were deficient. In some instances we found a complete lack of any discernible policy. In others, we identified areas of policy where we believed the emphasis to be wrong. In our inquiry into the use of science in UK international development policy, for example, we found that the Department for International Development suffered from a fundamental lack of scientific culture, which hampered its attempts to reap the full benefits from the application of science and technology to development.

9. Our Report on *Scientific Publications: Free for all?* addressed issues that fall within the remit of a number of departments, including DTI, the Department for Education and Skills (DfES) and the Department for Culture, Media and Sport.¹⁰ One of the publishing models that we examined, the “author-pays” model, would necessitate a major change in the way that funds for research were allocated by DTI and DfES were it to predominate. We found that the Government was completely unprepared for such a change. Indeed, in oral evidence Government officials showed themselves to be only barely aware of the issues surrounding the way that scientific research papers are published. We are pleased to note, however, that our inquiry has improved the situation. The Director General of the Research Councils told us that “the ball is actually rolling. We have had numerous discussions. And, as I say, being quite frank, I think the interest of this Committee has stimulated that considerably”.¹¹ We hope that the Government will use the opportunity of our second Report on scientific publications to formulate a response that addresses the policy deficiency that we have identified.¹²

10. Alongside our major inquiries, the Committee has conducted two brief inquiries in response to emerging areas of policy. On Christmas day 2003, the Beagle 2 lander, a British-led component of a European mission to Mars, was due to touch down on the planet and start searching for life there. It failed to make contact with earth after its

7 “An effective scientific publishing system for European research” (IP/04/747), Brussels, 15 June 2004

8 Tenth Report of the Committee, Session 2003–04, *Scientific Publications: Free for all?*, HC 399

9 Fifth Report of the Committee, Session 2003–04, *Too little too late?: Government Investment in Nanotechnology*, HC 56

10 HC (2003–04) 399

11 Ibid, Q 388

12 Fourteenth Report of the Committee, Session 2003–04, *Responses to the Committee's Tenth Report, Session 2003–04, Scientific Publications: Free for all?*, HC 1200

scheduled landing time, and was subsequently declared lost. In February 2004 the UK Government and the European Space Agency (ESA) established a Commission of Inquiry to investigate the circumstances and possible reasons that led to the failure of the mission. The Committee announced its inquiry into Beagle 2 on 26 May 2004, immediately after the partial publication of the UK/ESA report – the full report has never been released. In our Report, we praised the Government for its enthusiasm in taking on this high risk venture but found that it had been unable to respond effectively to the project's relatively sudden emergence to find guaranteed financial backing. We also commented that a lack of cooperation between the UK Beagle 2 consortium and ESA had contributed to the problems with the project.¹³

11. Since 2002, the Medical Research Council (MRC) has been reviewing the position of one of its funded research institutes, the National Institute of Medical Research (NIMR) at Mill Hill. In April 2003, MRC published its *Forward Investment Strategy*, which concluded that a smaller investment in a clinical multi-disciplinary environment for the Institute would be likely to deliver a similar volume of science and greater value for money in the longer-term. As a consequence, MRC endorsed a proposal to relocate NIMR, initially to Addenbrooke's hospital in Cambridge, subject to consultation. However, following the consultation, a further review was undertaken, which proposed a move to one of two possible university hospital sites in London. The possible move has proved to be extremely controversial, with many researchers at NIMR openly opposing the MRC plans. We announced our inquiry into the way that the move has been handled on 21 October 2004, following a visit to the Institute two days previously.¹⁴ We took evidence from representatives of both NIMR and MRC on 1 and 21 December and, in 2005, on 10 January. The Committee aims to report its findings before MRC makes its final decision on the proposed move in February 2005.

12. Our regular "Science Question Time" sessions with Lord Sainsbury have also given us the opportunity to examine areas of emerging policy (see paragraph 32). In particular we have asked the Minister repeatedly about what action the Government intends to take to protect people connected with scientific research on animals from the actions of animal rights protesters.¹⁵ We are pleased to note that the pressure that we have applied on this issue has borne fruit in the guise of new legislation introduced in December 2004 specifically designed to address the concerns that we raised.¹⁶

Task 3: To scrutinise legislation and proposed legislation on science and technology matters

13. Our inquiry into human reproductive technologies and the law revisits the 1990 Human Fertilisation and Embryology Act, particularly in the light of the development of new technologies for research and treatment and recent changes in ethical and social attitudes.¹⁷ In order to set the 1990 Act in a European context we visited Sweden and Italy

13 Twelfth Report of Committee, Session 2003–04, *Government Support for Beagle 2*, HC 711

14 Press notice 73 of Session 2003–04, 21 October 2004, see www.parliament.uk/s&tcom

15 "Science Question Time" sessions on 9 February, 12 May, 14 July and 1 December 2004

16 *Serious Organised Crime and Police Bill*, [Bill 5 (2004–05)]

17 Press notice 30 of Session 2003–04, 30 March 2004, see www.parliament.uk/s&tcom

in November this year. During the visit we learnt about legislation that is perceived to be respectively more liberal and more conservative than our own, and explored the impact that the two approaches have had on clinicians, practitioners and the public. We understand that the Department of Health will await the outcome of our inquiry before it undertakes a revision of the 1990 Act, and that it will take into account our recommendations when carrying out this work. In our Annual Report 2003 we observed that it was regretful that the Government did not publish the Human Tissue Bill in draft form prior to its introduction in Parliament in order to allow time for pre-legislative scrutiny. We hope that any new legislation arising from a revision of the 1990 Act will be published first in draft form in order to allow Parliament to carry out this important role.

Objective B: Government expenditure on science and technology

Task 4: To examine the expenditure plans and outturn of the Department of Trade and Industry, so far as it relates to science and technology, and of the Research Councils

14. We examine the relevant parts of estimates produced by the Department of Trade and Industry and seek written explanations of major changes as a matter of routine. In this task we are greatly assisted by the Scrutiny Unit. This year the Government has provided us with some additional material to consider in the form of its *Science and Innovation Investment Framework 2004–2014*. In our evidence session with Ministers on 1 November we explored the impact that the Government's considerably increased investment in science and technology would have on research, science education and UK industry. We also held evidence sessions on the investment framework with the Secretary of State for Trade and Industry and the Science Minister. The results of these sessions and our analysis of the written evidence that we received in connection with them will be contained in our OST Scrutiny Report 2004.¹⁸

15. In 2003 we found evidence of poor financial management at the Medical Research Council (MRC) and the Natural Environment Research Council. We were pleased to note this year that the expenditure of the three Research Councils that we examined appeared to have been well managed.¹⁹ Our scrutiny of the Research Councils is explored in more detail in paragraphs 20 to 24.

Task 5: To examine other Government Departments' expenditure on research and advice on science and technology

16. All Government departments use science and technology, either to inform or to implement their policies. Consequently, many of our inquiries examine the work of departments other than DTI. In 2004 we conducted a major inquiry into the use of science in UK international development policy.²⁰ As part of this inquiry we travelled to Malawi,

18 The Committee produces a Report on the work of OST each year.

19 Third Report of the Committee, Session 2003–04, *The Work of the Biotechnology and Biological Sciences Research Council*, HC 6; Eighth Report of the Committee, Session 2003–04, *The Work of the Council for the Central Laboratory of the Research Councils*, HC 462; and First Report of the Committee, Session 2004–05, *The work of the Economic and Social Research Council*, HC 13

20 Thirteenth Report of the Committee, Session 2003–04, *The Use of Science in UK International Development Policy*, HC 133

where we saw at first hand the extent to which science and technology are used to assist development. Our Report expressed concern that “the quality of policy making in [the Department for International Development] DFID may, on occasion, have been compromised by a lack of recognition of the value and role of research and evaluation”.²¹ Both during the inquiry and after the publication of the Report, it was widely acknowledged that the Committee had played an important role in increasing the emphasis placed on research and advice on science and technology within DFID both as it developed its research strategy, and more generally. The Secretary of State, when he appeared before us on 7 July 2004, stated that “the inquiry you have undertaken has had a profound impact, certainly on me and on the Department. [...] As far as the relationship between select committees and government departments are concerned, I think this is how it should work, because if we do not inquire and listen to each other and reflect and respond, then the system does not work very effectively”. He also credited the Committee with his decision to appoint a Chief Scientific Adviser at DFID, an appointment that we hope will strengthen the scientific culture within the department and have a positive effect on its work.²²

17. Our inquiry into human reproductive technologies and the law includes an examination of the work of the Human Fertilisation and Embryology Authority (HFEA), a non-departmental Government body under the aegis of the Department of Health. As part of the terms of reference for the inquiry we have undertaken, amongst other things, “to consider the composition, expertise and approach of the HFEA, its code of practice, licensing arrangements and the provision of information to patients, the profession and the public”.²³ In oral evidence we have sought to establish how responsive the HFEA has been to the emergence of new technologies to assist human reproduction. We expect to produce a Report in spring 2005.

Task 6: To monitor European Union expenditure on scientific research

18. Throughout 2004 we have been pursuing the question of where the International Tokamak Experimental Reactor (ITER), an international nuclear fusion development project, should be located. The collaborators, the EU, the US, China, Russia, Japan and South Korea have not been able to come to an agreement on whether ITER should be awarded to France or Japan, the two short-listed sites. The UK backs the French bid. Our questions to the Secretary of State for Trade and Industry and the Science Minister have helped to ensure continued Government attention to this issue, and have contributed to the formulation of a UK position.²⁴ We have also asked questions about the possible formation of a European Research Council and its implications for the UK research funding system.²⁵ More broadly, our inquiries into EU chemicals legislation, Government

21 Ibid, p 3

22 Ibid, Q 507

23 Press notice 30, 30 March 2004, see www.parliament.uk/s&tcom

24 Oral evidence given by Rt Hon Patricia Hewitt MP, Secretary of State for Trade and Industry, on 14 July 2004; and Oral evidence given by Lord Sainsbury of Turville, Parliamentary Under-Secretary of State, Science and Innovation, DTI, 1 December 2004. Both transcripts are currently available at www.parliament.uk/s&tcom, and will be published with our OST Scrutiny Report 2004.

25 Oral evidence given by Lord Sainsbury of Turville, Parliamentary Under-Secretary of State, Science and Innovation, DTI, on 14 July 2004, Qq 83–88. The transcript is currently available at www.parliament.uk/s&tcom and will be published with our OST Scrutiny Report 2004.

support for Beagle 2, the use of science in UK international development policy and scientific publications have all looked at scientific research within the context of the EU and its funding mechanisms.

Objective C: Administration of the Office of Science and Technology and the Research Councils

Task 7: To examine the Office of Science and Technology's objectives and performance

19. OST is not a department in its own right, and thus has no headline Public Service Agreements, although one of DTT's targets relates specifically to the Science Base. There are other sources that can be used to assess the performance of the UK Science and Engineering Base. This year Evidence Ltd, an independent consultancy, published its second annual report on the performance of the UK within the international scientific community against a series of high-level metrics. We will comment on the UK's performance against these indicators in our OST Scrutiny Report 2004. The *Science and Innovation Investment Framework 2004—2014* stated OST's undertaking to develop a new performance management system that would be used to inform the resource allocations to the seven Research Councils. On 7 December we held a meeting with the Director General of the Research Councils during which he explained the rationale behind the new system. Informal contacts with the department such as these improve our understanding of the systems and mechanisms used by OST, and thus enhance the quality of our scrutiny.

Task 8: To monitor the work of the Research Councils

20. We set ourselves the target of holding separate scrutiny sessions with each of the seven Research Councils over the course of the Parliament. We published a Report on the seventh, the Economic and Social Research Council, in December 2004. This year we also published Reports on *The Work of the Biotechnology and Biological Sciences Research Council* and *The Work of the Council for the Central Laboratory of the Research Councils*.²⁶ In early 2005 we will hold an evidence session with Research Councils UK (RCUK) to assess its performance, particularly in light of the independent review of its work commissioned by OST and published in October 2004.²⁷ We look forward to scrutinising the Arts and Humanities Research Board when it becomes a Research Council.

21. In 2004 we have seen an improvement in the performance of the Research Councils that we scrutinized relative to those that we examined in 2003. We believe that this is, at least in part, due to our rolling programme of scrutiny, which has given the Research Councils a strong incentive to ensure that they are working efficiently and to a high standard. One of our most valuable contributions has been the identification of best practice. In the Government's response to our Report on *The Work of the Biotechnology and Biological Sciences Council*, RCUK undertook to examine all the recommendations made by the Committee in its Reports on the work of each of the Research Councils.²⁸ We

²⁶ HC 6 and HC 462

²⁷ OST, *OST Review of Research Councils UK* (Autumn 2004)

²⁸ Appendix to the Committee's Third Special Report, Session 2003–04, *Government Response to the Committee's Third Report, Session 2003–04: The Work of the Biotechnology and Biological Sciences Research Council*, HC 526, p 1

understand that it will be compiling a document outlining the ways in which our recommendations have been used to date. This will not only assist the Research Councils in identifying and following best practice, but will also enable us to assess the effectiveness of our own work. Our relationship with RCUK has also improved substantially since we began our rolling programme of scrutiny. We hope that this will help to counter the atmosphere of mutual suspicion in which scrutiny sometimes takes place.

22. As well as the evidence sessions held with the individual Research Councils, we also held an introductory session with the then newly-appointed Director General of the Research Councils (DGRC), Professor Sir Keith O’Nions. In a subsequent Report we noted that Sir Keith’s approach to the role differed significantly from that of his predecessors. He told us that he did not believe that he should become involved in the day-to-day running of the Research Councils and looking at cross-council issues.²⁹ We identified a need for further clarification of the DGRC’s role in relation to RCUK, a conclusion that was subsequently endorsed by OST in its review of RCUK.³⁰ We look forward to pursuing this issue when we take evidence from RCUK in the new year.

23. The work carried out and funded by the Research Councils has a bearing on many of our major inquiries. This year we took evidence from them as part of our inquiries into scientific publications, the use of science in UK international development policy and Government support for Beagle 2. Our inquiry into the future of the National Institute of Medical Research at Mill Hill is looking closely at the work of MRC (see paragraph 11).

24. It has been the convention in the past for the Research Councils to have an input into the responses to our Reports produced by the Government. There are occasions, however, when Research Council policy, and views, differ from those of OST. In these cases, a joint response is unsatisfactory and, on occasion, self-contradictory. Particularly in view of the DGRC’s insistence on the separation of the roles of OST and RCUK, we are very keen to see a separate response from the Research Councils where appropriate.

Task 9: To scrutinise major appointments made by the Secretary of State for Trade and Industry

25. We have undertaken to question new appointees to important posts in the science world, and to publish short Reports on these evidence sessions where appropriate. Although we have no power to ratify or to veto appointments, such sessions provide us with the opportunity to satisfy Parliament that the post has been filled with someone of sufficient calibre; establish the views and principles that the new incumbent brings to the job; alert them to our interests and concerns; and heighten awareness of our role in scrutinising the work of organisations with an impact on science policy and of the individuals that work within them. In 2004 we held introductory sessions with the new Director General of Higher Education, Sir Alan Wilson, and the new DGRC, and published short Reports on both. In 2005 we plan to question the new Chief Scientific Adviser at the Department for International Development following our inquiry into that department’s use of science in policy making and implementation.

29 Ninth Report of the Committee, Session 2003–04, *Director General of the Research Councils: Introductory Hearing*, HC 577, Q 8

30 OST, *OST Review of Research Councils UK* (Autumn 2004), para 6

Task 10: To examine the implementation of legislation and major policy initiatives, following up earlier Reports by the Committee

26. Human genetics and embryology has been a longstanding interest of this and our predecessor Committees.³¹ Our 2002 Report, *Developments in Human Genetics and Embryology*, expressed the view that the 1990 Human Fertilisation and Embryology Act needed updating in the light of new scientific and technical developments that left it potentially open to legal challenge.³² The Government rejected this view in its response to our Report.³³ A number of subsequent high profile legal challenges to the Act persuaded us to take a more detailed look at the 1990 Act, and the way in which it is responding to the challenges posed by new technologies. We announced our inquiry into human reproductive technologies and the law in October 2003. After an online consultation that continued until March 2004, we sent out a call for written evidence and, in June, started to take oral evidence. As is stated in paragraph 13 of this Report, we understand that the Department of Health will wait until we have completed our investigation before it considers any changes to the existing legislation.

27. In September 2004 we published a Report entitled *Research Assessment Exercise: a re-assessment*.³⁴ The Research Assessment Exercise (RAE) has long been an interest of the Committee, as the research funding decisions made under this system have a significant impact on the health of the UK science and engineering base. Our inquiry into the RAE this year followed an earlier Report on the subject, published in July 2002, and a review of the RAE conducted by Sir Gareth Roberts in 2003.³⁵ Our 2004 Report concluded that many of the revisions to the RAE that were made following the Roberts investigation were very positive. Nonetheless we were not convinced that the revised mechanisms would prevent the RAE from continuing to compromise the provision of science and engineering in the UK. Following the Government response to our Report, published in November 2004, we are still not persuaded that the Government is adequately addressing many of the concerns that we have expressed about the RAE.³⁶ We plan to continue to pursue this issue in questions to the Science Minister and in the context of other inquiries.

28. Our regular “Science Question Time” sessions with the Science Minister have provided us with the opportunity to pursue issues derived from previous inquiries. In 2004 we asked questions following up our inquiries into school science education; research careers; renewable energy; the work of the Research Councils; scientific publications; and the use of science in UK international development policy.³⁷

31 Third Report of the Committee, Session 1994–95, *Human Genetics: the Science and its Consequences*, HC 41; Fifth Report of the Committee, Session 2000–01, *Genetics and Insurance*, HC 174

32 Fourth Report of the Committee, Session 2001–02, *Developments in Human Genetics and Embryology*, HC 791

33 Department of Health, *Government Response to the Report from the House of Commons Science and Technology Committee: Developments in Human Genetics and Embryology*, Cm 5693

34 Eleventh Report of the Committee, Session 2003–04, *Research Assessment Exercise: a re-assessment*, HC 586

35 Second Report of the Committee, Session 2001–02, *The Research Assessment Exercise*, HC 507

36 First Special Report of the Committee, Session 2004–05, *Research Assessment Exercise: a re-assessment: Government Response to the Committee's Eleventh Report of Session 2003–04*, HC 34

37 Third Report of the Committee, Session 2001–02, *Science Education From 14 to 19*, HC 508; Eighth Report of the Committee, Session 2001–02, *Short-Term Research Contracts in Science and Engineering*, HC 1046; Seventh Report of the Committee, Session 2000–01, *Wave and Tidal Energy*, HC 291; Tenth Report of the Committee, Session 2003–04, *Scientific Publications: Free for all?*, HC 399; Thirteenth Report of the Committee, Session 2003–04, *The Use of Science in UK International Development Policy*, HC 133

Task 11: To hold Ministers to account

29. Our scrutiny of science policy across Government leads us to take evidence from Ministers in many different Government departments, depending on the inquiry. The Government's *Science and Innovation Investment Framework 2004—2014* was jointly produced by HM Treasury, DTI and DfES. Our session with a Ministerial representative from each of these departments on 1 November was, for us, a rare opportunity to question the Chief Secretary to the Treasury about the economic rationale behind the Government's emphasis on science. In the past we have been frustrated because the questions we have put to Ministers on the broader issues of science policy have inevitably strayed beyond the remit of the Minister before us. It was, therefore, extremely useful for us to be able to question a panel of Ministers whose combined responsibilities covered all our areas of questioning.

30. In 2004 we took evidence from the Secretary of State for International Development as part of our inquiry into the use of science in UK international development policy. As is outlined in paragraph 16 above, the inquiry had a profound impact on the approach to science taken by DFID and indirectly resulted in their appointment of a Chief Scientific Adviser. We also took evidence from the Minister of State for Rural Affairs and Local Environmental Quality as part of our inquiry into EU chemicals legislation. We saw the Science Minister in conjunction with our inquiries into Beagle 2 and nanotechnology. In early 2005 we plan to take evidence from a Minister from the Department of Health as part of our inquiry into human reproductive technologies and the law, and from a Home Office Minister as part of our forensic science inquiry.

31. We aim to take evidence from the Secretary of State for Trade and Industry at least once each year. On 14 July this year we questioned her on, amongst other issues, the Government's targets for research and development; the management of the science base; regional concentration of research; the location of large facilities; and climate change and energy. The session will contribute to our OST Scrutiny Report 2004.

32. In last year's Annual Report we announced that we would be holding regular "Science Question Time" sessions with the current Science Minister, Lord Sainsbury. It has been a longstanding regret of ours that the Minister's membership of the House of Lords denies Members the opportunities enjoyed by members of other select committees to question Ministers during debates and departmental question times. We were therefore very pleased that the Science Minister agreed to our suggestion of regular brief sessions to discuss science policy issues. This year we held four such sessions on 9 February, 12 May, 14 July and 1 December. As well as raising issues of concern to the Committee, we solicited topics for questioning from the public and raised issues of national interest. The format has enabled us to be more reactive to topical issues than has been possible in the past. We have found the sessions to be extremely helpful, both in keeping us abreast of the latest developments, and informing our ongoing scrutiny of OST. We aim to continue holding these sessions at regular intervals in 2005.

Objective D: To assist the House in debate and decision

Task 12: To produce Reports informing the House on science and technology matters and of the science perspective on public policy issues, some of them being suitable for debate in the House, including Westminster Hall, or in debating committees

33. We published 15 Reports in 2004: of these, four formed part of our ongoing scrutiny of OST and the Research Councils; three followed introductory sessions with recent appointees; and four were on major inquiries conducted during the year. Four of our Reports, together with the Government responses to them, were debated in Westminster Hall. On 12 February our Report on *Light Pollution and Astronomy* was debated.³⁸ Six current Committee members and one former member spoke during the debate, which was replied to by the Parliamentary Under-Secretary of State from the Office of the Deputy Prime Minister.³⁹ It was attended by many of those who submitted written and oral evidence to the original inquiry. The extent to which the Committee's Report and subsequent debate influenced Government policy is apparent in the Clean Neighbourhoods and Environment Bill, introduced in the House in December 2004, which includes a provision to make light pollution a statutory nuisance, as recommended in our Report.⁴⁰

34. Six members of the Committee participated in a debate on *The Scientific Response to Terrorism* on 18 March, to which the Minister for Citizenship and Immigration from the Home Office replied.⁴¹ On 24 June the Minister for Industry and the Regions from DTI replied to a debate in which five Committee members participated on *Too little too late: Government Investment in Nanotechnology*.⁴² Our Report on *Within REACH: The EU's new chemicals strategy* was also debated, on 9 September. Four Committee members participated in the debate, which was replied to by the Minister for Rural Affairs and Local Environmental Quality from the Department for the Environment, Food and Rural Affairs.⁴³

38 Seventh Report of the Committee, Session 2002–03, *Light Pollution and Astronomy*, HC 747

39 HC Deb, 12 February 2004, cols. 488–514WH

40 *Clean Neighbourhoods and Environment Bill* [Bill 11 (2004–05)]

41 HC Deb, 18 March 2004, cols. 141–184WH

42 HC Deb, 24 June 2004, cols. 440–472WH

43 HC Deb, 9 September 2004, cols. 326–370WH

3 Other comments

Government Responses

35. This year we received five out of nine Government responses within the established two month deadline, compared to six out of eight responses published last year. The average response time increased from just over two months to three months this year, although, as in 2003, we were consulted in advance over any delays. Last year we observed that there was a tendency for Government responses to restate existing policy and to set out those measures already being taken rather than to focus on new measures and developments. We were disappointed that there was very little change to this approach in 2004. Such responses give the impression of stagnation in Government policy-making.

36. We were particularly frustrated by the Government response to our Report on *Scientific Publications: Free for all?*. As we noted in the Report published alongside the response, the Government failed to reply to the substance of some of our arguments and appeared to misinterpret others.⁴⁴ It also argued against a number of recommendations that the Committee did not make. This tendency was picked up in the media at the time. One journalist, writing in the *Guardian*, noted that “the government is, of course, within its rights to ignore select committees, but it could at least have properly read the report”.⁴⁵ We hope that the Government’s reluctance to engage with the issues raised in our Report does not set the trend for future responses. One of the primary functions of the scrutiny carried out by select committees is, after all, to help Government to address areas of policy deficiency. This process will become more difficult if the Government misinterprets the recommendations made in select committee reports in order to avoid the arguments.

37. In its Fourteenth Report of Session 2003–04, the Committee also raised concerns that a non-departmental public body had been put under pressure by DTI not to submit an independent, and divergent, response to the Committee’s Report on scientific publications. We regarded the approach taken by DTI in this case to be unduly sensitive. We have raised this issue with the Liaison Committee in the context of the Cabinet Office’s revised “Guidance, Evidence and Response to Select Committees” on the provision of evidence by Government to Select Committees.

Relations with the Office of Science and Technology and other Government departments

38. In general, our relations with OST have been good during 2004. As in 2003, we have been kept informed of forthcoming announcements and have been supplied with the information on performance that we need in order to carry out our work. OST has, for the most part, been punctual in providing responses to our questions prior to, and after, evidence sessions. Where there have been delays we have been consulted, although sometimes only when it becomes apparent that the deadline will not be met as agreed.

44 Fourteenth Report of the Committee, Session 2003–04, *Responses to the Committee’s Tenth Report, Session 2003–04, Scientific Publications: Free for all?*, HC 1200

45 Richard Wray, “Confused decision on science publishing”, *The Guardian*, 9 November 2004

39. Both DTI and OST have published several important policy documents in 2004. Neither has been very punctual in sending copies to the Committee. This delays our work and could easily be avoided if the department had systems in place to ensure that we received all relevant documentation in a timely fashion. It is also very useful if we can be kept informed of any work that is carried out by the department in response to our inquiries. For example, we would expect to be informed when Ministers respond immediately to our Report by means of letters to national newspapers. This did not always happen in 2004.⁴⁶

40. Requests for witnesses to attend oral evidence sessions have generally been met. However, our Report on *Scientific Publications: Free for all?* records the difficulties we experienced with DTI in securing officials to give evidence during the inquiry.⁴⁷ We asked to see representatives from both OST and the Digital Content and Publishing Unit at DTI. We were told that the Director General of the Research Councils would represent both groups. In the event we found that he could not speak on behalf of the Digital Content and Publishing Unit, and thus many of our questions went unanswered. We usually leave it up to the department concerned to decide who is best equipped to speak to the Committee. For the most part this arrangement functions well. Nonetheless, we make specific requests for a reason. Denying them leads only to frustration, both for the Committee and the witnesses themselves.

41. It is perhaps inevitable that the focus of departments other than DTI is on the relevant departmental select committee, rather than on us. Nonetheless, in 2004 this has hampered our investigations on a number of occasions. During our inquiry into the use of science in UK international development policy we liaised extensively with the Department for International Development. Whilst staff there were extremely obliging, it sometimes took them a number of days to respond to queries. Furthermore, on occasion we had to request copies of documents that were relevant to our inquiry after learning about their existence from other sources. By contrast, we have found the Department of Health to be very helpful and efficient in their dealings with us in connection with our inquiry into human reproductive technologies and the law. Fostering good relationships between departments and select committees help to ensure effective scrutiny. For this reason it is extremely important that Government departments place sufficient emphasis on the very valuable work carried out by their Parliamentary Clerks.

Relationships with the science and engineering community and the public

42. Science policy is a relatively small field. It is inevitable that some of the subjects explored by the Committee also attract studies from other bodies. In our Annual Report last year we noted that our inquiry into Government support for nanotechnology would complement the study conducted by the Royal Society and the Royal Academy of Engineering into the environmental, ethical, health and safety concerns arising from the

46 Lord Sainsbury, "Open Access is not the only science publishing model", Letters to the Editor, *The Financial Times*, 10 November 2004, p 16

47 HC (2003–04) 399

new technology.⁴⁸ A meeting convened prior to the start of inquiry ensured that the two investigations did not overlap. The publication of both reports revealed the potential for fruitful cooperation between the Committee and other bodies carrying out science policy work on major scientific issues of public interest. However, the Royal Society has subsequently conducted several studies and activities that have, without acknowledgment, duplicated Reports already published by the Committee, notably on the scientific response to terrorism and international development. We are not convinced that this is a constructive way to proceed, or that it benefits science policy for work to be duplicated. In 2005 we hope to work more closely with the Royal Society to ensure that a more collaborative approach is taken to future activities.

43. Many of our inquiries draw contributions from people and organisations that would otherwise have no direct contact with Parliament. Our ongoing programme of scrutiny of the Research Councils, for example, frequently attracts evidence from individual researchers. This year our inquiry into human reproductive technologies and the law has required us to actively engage with members of the public who have a purely personal interest in the subject. We are fully aware that giving evidence before a select committee is a daunting prospect for such people, and that the inquiry process can seem impenetrable to those who have no previous experience of it. For this reason we are developing some written guidance on the work of the Committee and the inquiry process more generally that can be distributed to our stakeholders; routinely sent out with calls for evidence; and will be posted on our website - www.parliament.uk/s&tcom. We also plan to use the guidance in support of our outreach activities.

Working methods and innovation

44. Our inquiry into human reproductive technologies and the law deals with some extremely sensitive issues that have an impact on the everyday lives of members of the public. For this reason we decided to hold an online public consultation exercise before the start of the inquiry. The exercise was designed to attract both the comments of experts in the field and those of people with relevant personal experiences who would perhaps not want to submit formal evidence to a select committee. The consultation was announced in January 2004. During the consultation period, 333 users registered to take part in the online forum; 111 of those users logged onto the site and posted a total of 554 messages. Of those who actually took part in the consultation, approximately half were affiliated to an interested organisation, and half were private individuals.⁴⁹ In March 2004 we used the priorities identified in contributions to the consultation to help frame the terms of reference for the inquiry. The views expressed in the consultation have provided a useful context against which to consider the formal evidence we have received as part of this inquiry.

45. Two of the Reports we published this year, *The Use of Science in UK International Development Policy*, and *Scientific Publications: Free for all?*, were of particular interest to a clearly defined community of stakeholders. In order to engage these communities in the issues raised by the inquiries we hosted conferences to launch the Reports. These

48 The Royal Society and the Royal Academy of Engineering, *Nanoscience and nanotechnologies: opportunities and uncertainties* (July 2004)

49 A summary report by the Hansard Society on the online consultation can be found at www.tellparliament.net

conferences, held in Portcullis House at Westminster and the British Library respectively, were attended by contributors to the inquiries, interested organisations and members of the public, as well as by representatives from the press. The events made our Reports accessible to a wide audience and have helped to ensure the longevity of the debates surrounding the recommendations that we made.

46. In 2004 the Committee has actively pursued a number of important outreach activities. In December we met with the Committee for Science, Education, Culture, Youth and Sport of the Czech Parliament when they visited London. Similarly, when visiting Rome in November we held a meeting with the Italian Parliamentary Science Committee. These meetings with our opposite numbers help us to place our work in an international context and raise awareness of our inquiries on the global stage. We have been on a number of short UK visits and have hosted informal meetings to discuss issues of continuing interest to the Committee that are not necessarily the subject of a current inquiry. One of these visits, to the National Institute of Medical Research in Mill Hill, prompted us to announce a brief inquiry into its future. The Chairman and some members of the Committee have participated in seminars and conferences related to Committee inquiries. They have also appeared in the media on numerous occasions, either to promote Reports or to participate in debates about broad science policy issues.

4 Acronyms used in this Report

CSA — Chief Scientific Adviser

DfES — Department for Education and Skills

DFID — Department for International Development

DGRC — Director General of the Research Councils

DTI — Department of Trade and Industry

ESA — European Space Agency

HFEA — Human Fertilisation and Embryology Authority

ITER — International Tokamak Experimental Reactor

MRC — Medical Research Council

NIMR — National Institute of Medical Research

OST — Office of Science and Technology

RAE — Research Assessment Exercise

RCUK — Research Councils UK

Formal minutes

Wednesday 12 January 2005

Members present:

Dr Ian Gibson, in the Chair

Dr Evan Harris
Dr Brian Iddon

Mr Robert Key
Dr Desmond Turner

The Committee deliberated.

Draft Report (Annual Report 2004), proposed by the Chairman, brought up and read.

Ordered, That the Chairman's draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 46 read and agreed to.

Resolved, That the Report be the Second Report of the Committee to the House.

Ordered, That the Chairman do make the Report to the House.

[Adjourned till Wednesday 19 January at nine o'clock.]

Reports from the Science and Technology Committee since 2001

Session 2004–05

First Report	The Work of the Economic and Social Research Council	HC 13
--------------	------------------------------------------------------	-------

Session 2003–04

First Report	Annual Report 2003	HC 169
Second Report	Chief Executive of the Medical Research Council: Introductory Hearing (<i>Reply HC 629</i>)	HC 55
Third Report	The Work of the Biotechnology and Biological Sciences Research Council (<i>Reply HC 526</i>)	HC 6
Fourth Report	Office of Science and Technology: Scrutiny Report 2003 (<i>Reply HC 588</i>)	HC 316
Fifth Report	<i>Too Little too late?</i> Government Investment in Nanotechnology (<i>Reply HC 650</i>)	HC 56
Sixth Report	Within REACH: the EU's new chemicals strategy (<i>Reply HC 895</i>)	HC 172
Seventh Report	Director General for Higher Education: Introductory Hearing (<i>Reply HC 1015</i>)	HC 461
Eighth Report	The Work of the Council for the Central Laboratory of the Research Councils (<i>Reply HC 1199</i>)	HC 462
Ninth Report	Director General of the Research Councils: Introductory Hearing (<i>Reply HC 1059</i>)	HC 577
Tenth Report	Scientific Publications: Free for all?	HC 399
Eleventh Report	Research Assessment Exercise: a re-assessment (<i>Reply HC 34, 2004–05</i>)	HC 586
Twelfth Report	Government support for Beagle 2	HC 711
Thirteenth Report	The Use of Science in UK International Development Policy	HC 133
Fourteenth Report	Responses to the Committee's Tenth Report, Session 2003–04, Scientific Publications: Free for all?	HC 1200

Session 2002–03

First Report	The Work of the Particle Physics and Astronomy Research Council (<i>Reply HC 507</i>)	HC 161
Second Report	Annual Report 2002	HC 260
Third Report	The Work of the Medical Research Council (<i>Reply Cm 5834</i>)	HC 132
Fourth Report	Towards a Non-Carbon Fuel Economy: Research, Development and Demonstration (<i>Reply HC 745</i>)	HC 55
Fifth Report	The Work of the Natural Environment Research Council (<i>Reply HC 1161</i>)	HC 674
Sixth Report	UK Science and Europe: Value for Money? (<i>Reply HC 1162</i>)	HC 386
Seventh Report	Light Pollution and Astronomy (<i>Reply HC 127, 2003–04</i>)	HC 747

Eighth Report	The Scientific Response to Terrorism (<i>Reply Cm 6108</i>)	HC 415
Ninth Report	The Work of the Engineering and Physical Sciences Research Council. (<i>Reply HC 169, 2003–04</i>)	HC 936

Session 2001–02

First Report	Cancer Research – A Follow-Up (<i>Reply Cm 5532</i>)	HC 444
Second Report	The Research Assessment Exercise (<i>Reply HC 995</i>)	HC 507
Third Report	Science Education from 14 to 19 (<i>Reply HC 1204</i>)	HC 508
Fourth Report	Developments in Human Genetics and Embryology (<i>Reply Cm 5693</i>)	HC 791
Fifth Report	Government Funding of the Scientific Learned Societies (<i>Reply HC 53</i>)	HC 774
Sixth Report	National Endowment for Science, Technology and the Arts: A Follow-Up (<i>Reply HC 276</i>)	HC 1064
Seventh Report	The Office of Science and Technology: Scrutiny Report 2002 (<i>Reply HC 293</i>)	HC 860
Eighth Report	Short-Term Research Contracts in Science and Engineering (<i>Reply HC 442</i>)	HC 1046

ISBN 0-215-02128-2



9 780215 021281

Distributed by TSO (The Stationery Office)

and available from:

TSO

(Mail, telephone and fax orders only)

PO Box 29, Norwich NR3 1GN

General enquiries 0870 600 5522

Order through the Parliamentary Hotline *Lo-call* 0845 7 023474

Fax orders 0870 600 5533

Email book.orders@tso.co.uk

Internet <http://www.tso.co.uk/bookshop>

TSO Shops

123 Kingsway, London WC2B 6PQ

020 7242 6393 Fax 020 7242 6394

68-69 Bull Street, Birmingham B4 6AD

0121 236 9696 Fax 0121 236 9699

9-21 Princess Street, Manchester M60 8AS

0161 834 7201 Fax 0161 833 0634

16 Arthur Street, Belfast BT1 4GD

028 9023 8451 Fax 028 9023 5401

18-19 High Street, Cardiff CF10 1PT

029 2039 5548 Fax 029 2038 4347

71 Lothian Road, Edinburgh EH3 9AZ

0870 606 5566 Fax 0870 606 5588

The Parliamentary Bookshop

12 Bridge Street, Parliament Square

London SW1A 2JX

Telephone orders 020 7219 3890

General enquiries 020 7219 3890

Fax orders 020 7219 3866

Accredited Agents

(See Yellow Pages)

and through good booksellers

© Parliamentary Copyright House of Commons 2005

Applications for reproduction should be made in writing to The Licensing Division,

HMSO, St Clements House, 2-16 Colegate, Norwich NR3 1BQ

– Fax 01603 723000

ISBN 0 215 02128 2